

Coin Acceptor and Pulse Bill Validator to USB Interface **Model ARB-C23**

DESCRIPTION

This Interface Unit (IU) is designed to combine two data streams, from a Bill Validator (BV) in pulse interface mode and a Coin Acceptor (CA), into one USB serial communication. This unit functions as a slave to a master controller, for example a PC.

OPERATION

The master and slave communication is based on master requests and slave replies. A master repeatedly sends a status request to the IU and IU answers by sending its current status. At power up, acceptance of the BV and CA are inhibited. The master allows acceptance of bills and coins by sending acceptance codes to the IU. If the IU receives an unknown or wrong response, it will send back the NACK message and inhibit acceptance. If the IU does not receive a query from the master in the predefined time slot, it will inhibit acceptance of the BV and CA. When communication with the BV or the CA fails, the IU will transmit an error code to the master as current status. If the master does not receive an answer to its query in the predefined time slot, the master will assume that the IU is out of order.

BILL VALIDATOR CONNECTOR PINOUT

Pin 1: Ground

Pin 2: Switched Output

Pin 3: Inhibit Bill Validator

Pin 4: Bill Credit pulse Input

Note: Pin 1 is the pin closest to the corner of the box.

HARDWARE SPECIFICATION

- Coin Acceptor CF-330 with Standard 212-interface programmed for up to 5 coins.
Please Note: The 10 Pin Ribbon Cable connects to the set of 10 pins (2 rows of 5) in the bottom right corner of the CF330 (Rear View)
- Bill Acceptor in pulse mode limited to between 1 to 4 pulses per dollar
- Voltage 12VDC
- Current (Idle) < 0.05A
- Current (Peak) 0.4A for 0.1 sec. when accepting
- Communication USB asynchronous half duplex.
 - Baud rate 9600 BPS
 - Start bit 1
 - Data bits 8
 - Parity NO
 - Stop bit 1
- Cable Standard USB
- IU query wait time (max) 1 second

- Master wait time (max) 2.5 ms
- Query Time-Slot 200 – 400 ms
- Dimensions approx. 110 x 70 x 80 mm (4.3" x 2.7" x 3.1")
- Weight approx. 100 g (0.2 lb.)

SOFTWARE SPECIFICATION

- Master Command codes (HEX)
 - 0x01 to get status of the IU (query)
 - 0x02 to enable the Bill Validator and the Coin Acceptor *
 - 0x03 to disable the Bill Validator and the Coin Acceptor *
 - 0x04 to enable the Bill Validator *
 - 0x05 to disable the Bill Validator *
 - 0x06 to enable the Coin Acceptor
 - 0x07 to disable the Coin Acceptor
 - 0x08 to turn Switch output ON
 - 0x09 to turn Switch output OFF
- IU (slave) status response codes
 - 0x00 Acknowledge (ACK)
 - 0x01 A
 - 0x02 B
 - 0x04 C
 - 0x08 D
 - 0x10 E
 - 0x40 Eject button
 - 0x80 Bill Validator error (pulse output signal is active (low) for too long a time)
 - 0x81 \$1 bill
 - 0x85 \$5 bill
 - 0x8A \$10 bill
 - 0x94 \$20 bill
 - FE Coin Acceptor error (one or more output signals are active (low) for too long a time)
 - FF Negative Acknowledge (the IU does not recognise command) (NACK)
 - 1F Coin Shoot Obstructed

* **Some Models of the Bill Validator cannot be disabled when in Pulse Interface Mode.**

PACKING LIST

1. ARB-C23 Interface Unit
2. 12VDC Power supply (Wall mount adapter)
3. ARB-H900 – 4 to 18 pin Bill Validator adapter harness (Optional)
4. ARB-H201 – 10 pin ribbon cable for CF-330 Coin Acceptor (Optional)
5. USB Cable (Optional)
6. Cashflow 330 Coin acceptor (Optional)
7. Bill Validator (Optional)
8. Demo Disk including – Demo program, help file and ARB-C23 user manual (Trial package only)